

Customer No.: 31561
Application No.: 10/065,566
Docket No.: 9747-US-PA

AMENDMENTS

To the Drawings:

Please enter the attached drawing sheet of amended FIG. 3 and replace all of the prior versions. In FIG. 3, as currently amended, the control signal is labeled as "316" which is connected to the gate terminal of the TFT3 315, and "the voltage level of a control signal" has been specified, in accordance with the claimed invention and supported by the specification.

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REMARKS

This is a full and timely response to the outstanding Final Office Action mailed Mar. 13, 2006. Claims 3 and 12 have been amended, in which subject matters indicated by the Examiner as not disclosed in the specification are deleted. Thus there is no new matter entered thereby. Claims 1, 12 and 18 have also been amended, in which definite articles are replaced with indefinite articles. The other claims remain as the previous version. Reconsideration and allowance of the application and presently pending claims 1-17 are respectfully requested.

Claim Rejections-35 U.S.C. §112

Claims 3 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written requirement. More particularly, it is asserted that the feature "as soon as the light-emitting device driving unit providing a driving current to the light-emitting device of the next pixel, the discharging unit discharging the light-emitting device" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In response thereto, Applicant has amend the feature as "the discharging unit discharges the light-emitting device in response to a logic state of the scan signal from the next scan line immediately", which is well supported in the disclosure.

As stated in Lines 12-14 at Paragraph [0031] of the specification,

"The gate terminal of the third thin film transistor (TFT3) is connected to the scan voltage source V_{sn+1} of the next scan line (that is, the $(n+1)^{th}$ scan line)."

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As stated in Lines 2-8 at Paragraph [0032] of the specification,

"To reduce the increase in driving voltage, a discharging unit 315 is incorporated into the conventional driving circuit as shown in Fig. 1 by connecting to the next scan line. Using the sequential scan line switching property of the driving circuit, the discharging unit 315 will discharge the light-emitting device 320 immediately after receiving an activation signal (a scan voltage transition from a low voltage level to a high voltage level) from the next scan line."

As stated in Lines 7-10 at Paragraph [0032] of the specification,

"When the (n+1)th scan line is ready to switch on, the newly added thin film transistor (TFT3) will discharge the light-emitting device 320 in the pixel 300 corresponding to the nth scan line. Ultimately, increase in the driving voltage of the light-emitting device 320 is prevented."

Therefore, claims 3 and 14 are now in allowable form under 35 U.S.C. 112, first paragraph.

Claims 1, 12 and 18 are also rejected under 35 U.S.C. 112 as having insufficient antecedent basis for the limitation of "the voltage level of a control signal".

In response to the rejections to claims 1, 12 and 18 are also rejected under 35 U.S.C. 112, Applicant has amended claims 1, 12 and 18, in which definite articles are replaced with indefinite articles, thus claims 1, 12 and 18 are now in allowable forms in accordance with 35 U.S.C. 112.

Objections to the Drawings

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The drawing are objected to under 37 CFR 1.83(a).

In response to the objection to the drawings, Applicant hereby submits replacing drawing sheets, in which the control signal is labeled as "316", which is connected to the gate terminal of the TFT3 315, and "the voltage level of a control signal" has been specified, in accordance with the claimed invention and supported by the specification.

Therefore, the drawings as currently submitted satisfies the requirement of 37 CFR 1.83(a), and the objection thereto should be withdrawn.

Claim Rejections-35 U.S.C. §103

The Office Action rejected claims 1-5, 7, 8, 10, 12-16 and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Sekiya et al., US Patent 6,583,775 (Sekiya) in view of Ting US 6,486,606 (Ting).

In response to the rejection to claims 1-5, 7, 8, 10, 12-16 and 18-20 under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Ting, Applicant hereby traverses the rejection and submit that claims 1-5, 7, 8, 10, 12-16 and 18-20 are in allowable form.

With respect to claim 1: "A driving circuit for a display device having a plurality of pixels, wherein the driving circuit is used for driving the light-emitting device in each pixel, the driving circuit comprising: a light-emitting device driving unit coupled to the light-emitting device for circuit comprising: a light-emitting device driving unit coupled to the light-emitting device for providing a driving current to the light-emitting device selectively; and a discharging unit

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coupled to a point for connecting the light-emitting device driving unit for discharging the light-emitting device according to a voltage level of a control signal".

Applicant submits that such a driving circuit as set forth in claim 1 is neither taught, disclosed, nor suggested by Sekiya, Ting, or any of the other cited references, taken alone or in combination.

The Examiner admitted that "Sekiya did not expressly detail discharging the light emitting device" (Page 5 of the instant Office Action). Then the Examiner tried to use Ting as a secondary reference to modify Sekiya to arrive at the present inventions as set forth in claim 1. However, even Ting himself indicates that "such transistors determine charge/discharge of both the capacitor and the LED" in the Summary section (Column 2, lines 1 and 2), he teaches, suggests or discloses nothing about the discharging operation of the LED in the disclosure. On the contrary, Ting teaches "the discharging current from the capacitor drives the OLED luminescent" (Column 2, lines 56 and 57), "the transistor T2 is switched on by applying a discharging signal on the discharging line", and "[S]ince the capacitor is connected to the OLED via the transistor T2, a discharging current from the capacitor drives the OLED luminescent" (Column 3, lines 6-9). More evidences can be found throughout the disclosure of Ting that the discharging signal is employed for applying on the discharging line to switch on the transistor T2 and allowing a discharging current from the capacitor to drive the OLED luminescent. Therefore, Ting teaches only a discharging operation of the capacitor and no more than Sekiya does. Accordingly, neither Sekiya, nor Ting teaches, discloses or suggests "discharging the light-

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emitting device according to a voltage level of a control signal" as set forth in claim 1. As such, claim 1 and its dependent claims 2-5, 7, 8, and 10 are submitted to be novel and unobvious over Sekiya and Ting, or any of the other cited references, taken alone or in combination, and should be allowed (MPEP §2143.03).

Likewise, claims 12 and 18 include similar limitation as "discharging the light-emitting device according to a voltage level of a control signal" that is neither taught, suggested nor disclosed by Sekiya, Ting or any of the other cited references, taken alone or in combination. Therefore, claims 12 and 18 and their dependent claims 13-16, 19 and 20 are submitted to be allowable.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Ting and Hack et al. (2002/0030647).

In response to the rejection addressing to claim 11, Applicant submits that claim 11 depends on allowable claim 1, thus should also be allowable.

Claims 6, 9 and 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya in view of Ting and Filliman (5,255,220).

In response to the rejection addressing to claims 6, 9 and 17, Applicant submits that claim 6, 9 and 17 respectively depend on allowable claims 1 and 12, thus should also be allowable.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-20 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date : May 22, 2006



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